

## Abstract

- The invention relates to a method for heat treating a cast, homogenized and cooled metallic extrusion billet which, based on a diameter of 200mm, is reheated
- 5 to the required temperature in 20 minutes at most and then exposed to passive temperature equalization for 3 minutes at most, resulting in a temperature uniformity of less than  $\pm 10K$ . The billet is heated by gas burner flames, as well as by subsequent, forced convection by means of hot gas nozzle jets.
- 10 The reheated extrusion billet is then exposed to rapid cooling using water spray nozzles, in such a way that within a nozzle spraying period of 30 seconds at most, based on a diameter of 200mm, a temperature is set on the surface of the extrusion billet which is at least 150K below the extrusion temperature, the desired temperature distribution being set by the end of a temperature
- 15 equalization period which is longer than the nozzle spraying period.

Devices for performing such a heat treatment are also detailed.

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